

AP20 Rec'd PCT/PTO 22 JUN 2006

SEQUENCE LISTING

<110> TOOLGEN, INC.

<120> REGULATION OF PROKARYOTIC GENE
EXPRESSION WITH ZINC FINGER PROTEINS

<130> PCA41174-TGI

<150> US 60/532,362

<151> 2003-12-23

<160> 157

<170> FastSEQ for Windows Version 4.0

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1 5 10 15

Thr Arg His Gln Arg Ile His
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<213> Homo sapiens

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Phe Lys Cys Pro Val Cys Gly Lys Ala Phe Arg His Ser Ser Ser Leu

1 5 10 15

Val Arg His Gln Arg Thr His
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<213> Homo sapiens

<400> 3

Tyr Arg Cys Lys Tyr Cys Asp Arg Ser Phe Ser Ile Ser Ser Asn Leu

1 5 10 15

Gln Arg His Val Arg Asn Ile His
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Tyr Thr Cys Ser Tyr Cys Gly Lys Ser Phe Thr Gln Ser Asn Thr Leu
1 5 10 15
Lys Gln His Thr Arg Ile His
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<213> Homo sapiens

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Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Gly Cys Pro Ser Asn Leu
1 5 10 15
Arg Arg His Gly Arg Thr His
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<400> 6
Tyr Arg Cys Lys Tyr Cys Asp Arg Ser Phe Ser Ile Ser Ser Asn Leu
1 5 10 15
Gln Arg His Val Arg Asn Ile His
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<210> 7
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<400> 7
Phe Gln Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu
1 5 10 15
Lys Thr His Thr Arg Thr His
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<400> 8
Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu
1 5 10 15

Thr Arg His Arg Arg Ile His
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<210> 9

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<213> Homo sapiens

<400> 9

Tyr Glu Cys Asn Tyr Cys Gly Lys Thr Phe Ser Val Ser Ser Thr Leu
1 5 10 15
Ile Arg His Gln Arg Ile His
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<210> 10

<211> 23

<212> PRT

<213> Homo sapiens

<400> 10

Tyr Glu Cys Asp His Cys Gly Lys Ser Phe Ser Gln Ser Ser His Leu
1 5 10 15
Asn Val His Lys Arg Thr His
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<210> 11

<211> 23

<212> PRT

<213> Homo sapiens

<400> 11

Tyr Glu Cys Asp His Cys Gly Lys Ala Phe Ser Val Ser Ser Asn Leu
1 5 10 15
Asn Val His Arg Arg Ile His
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<210> 12

<211> 23

<212> PRT

<213> Homo sapiens

<400> 12

Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Thr Gln Ser Ser Asn Leu
1 5 10 15
Thr Lys His Lys Lys Ile His
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<210> 13

<211> 23

<212> PRT

<213> Homo sapiens

<400> 13

Phe Gln Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu
1 5 10 15
Lys Thr His Thr Arg Thr His
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<211> 23

<212> PRT

<213> Homo sapiens

<400> 14

Tyr Glu Cys Asp His Cys Gly Lys Ser Phe Ser Gln Ser Ser His Leu
1 5 10 15
Asn Val His Lys Arg Thr His
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<210> 15

<211> 23

<212> PRT

<213> Homo sapiens

<400> 15

Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu
1 5 10 15
Thr Arg His Arg Arg Ile His
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<210> 16

<211> 23

<212> PRT

<213> Homo sapiens

<400> 16

Tyr Lys Cys Pro Asp Cys Gly Lys Ser Phe Ser Gln Ser Ser Ser Leu
1 5 10 15
Ile Arg His Gln Arg Thr His
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<210> 17

<211> 23

<212> PRT

<213> Homo sapiens

<400> 17

Tyr Arg Cys Glu Glu Cys Gly Lys Ala Phe Arg Trp Pro Ser Asn Leu
1 5 10 15
Thr Arg His Lys Arg Ile His
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<210> 18

<211> 23

<212> PRT

<213> Homo sapiens

<400> 18

Tyr Glu Cys Asp His Cys Gly Lys Ser Phe Ser Gln Ser Ser His Leu
1 5 10 15
Asn Val His Lys Arg Thr His
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<210> 19

<211> 23

<212> PRT

<213> Homo sapiens

<400> 19

~~Tyr Glu Cys Asp His Cys Gly Lys Ala Phe Ser Val Ser Ser Asn Leu~~
~~1 5 10 15~~
~~Asn Val His Arg Arg Ile His~~
~~20~~

<210> 20

<211> 23

<212> PRT

<213> Homo sapiens

<400> 20

Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu
1 5 10 15
Thr Arg His Arg Arg Ile His
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<210> 21

<211> 23

<212> PRT

<213> Homo sapiens

<400> 21

Tyr Lys Cys Met Glu Cys Gly Lys Ala Phe Asn Arg Arg Ser His Leu
1 5 10 15
Thr Arg His Gln Arg Ile His
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<210> 22

<211> 23

<212> PRT

<213> Homo sapiens

<400> 22

Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu
1 5 10 15
Thr Arg His Arg Arg Ile His
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<210> 23
<211> 25
<212> PRT
<213> Homo sapiens

<400> 23
Phe Met Cys Thr Trp Ser Tyr Cys Gly Lys Arg Phe Thr Asp Arg Ser Ala Leu
1 5 10 15
Ala Arg His Lys Arg Thr His
20 25

<210> 24
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<212> PRT
<213> Homo sapiens

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Phe Gln Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu
1 5 10 15
Lys Thr His Thr Arg Thr His
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<210> 25
<211> 23
<212> PRT
<213> Homo sapiens

<400> 25
Tyr Glu Cys Asp His Cys Gly Lys Ser Phe Ser Gln Ser Ser His Leu
1 5 10 15
Asn Val His Lys Arg Thr His
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<210> 26
<211> 23
<212> PRT
<213> Homo sapiens

<400> 26
Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu
1 5 10 15
Thr Arg His Arg Arg Ile His
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<210> 27
<211> 23
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<213> Homo sapiens

<400> 27
Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu

1 5 10 15
Thr Gln His Arg Arg Ile His
20

<210> 28
<211> 23
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<213> Homo sapiens

<400> 28
Tyr Lys Cys Met Glu Cys Gly Lys Ala Phe Asn Arg Arg Ser His Leu
1 5 10 15
Thr Arg His Gln Arg Ile His
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<210> 29
<211> 23
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<213> Homo sapiens

<400> 29
Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu
1 5 10 15
Thr Arg His Arg Arg Ile His
20

<210> 30
<211> 23
<212> PRT
<213> Homo sapiens

<400> 30
Tyr Glu Cys Asp His Cys Gly Lys Ser Phe Ser Gln Ser Ser His Leu
1 5 10 15
Asn Val His Lys Arg Thr His
20

<210> 31
<211> 23
<212> PRT
<213> Homo sapiens

<400> 31
Tyr Glu Cys Asp His Cys Gly Lys Ala Phe Ser Val Ser Ser Asn Leu
1 5 10 15
Asn Val His Arg Arg Ile His
20

<210> 32
<211> 23
<212> PRT
<213> Homo sapiens

<400> 32

Phe Glu Cys Lys Asp Cys Gly Lys Ala Phe Ile Gln Lys Ser Asn Leu
1 5 10 15
Ile Arg His Gln Arg Thr His
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<210> 33

<211> 23

<212> PRT

<213> Homo sapiens

<400> 33

Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Gly Cys Pro Ser Asn Leu
1 5 10 15
Arg Arg His Gly Arg Thr His -
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<210> 34

<211> 23

<212> PRT

<213> Homo sapiens

<400> 34

Tyr Glu Cys Asp His Cys Gly Lys Ala Phe Ser Val Ser Ser Asn Leu
1 5 10 15
Asn Val His Arg Arg Ile His
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<210> 35

<211> 23

<212> PRT

<213> Homo sapiens

<400> 35

Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu
1 5 10 15
Thr Arg His Arg Arg Ile His
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<210> 36

<211> 23

<212> PRT

<213> Homo sapiens

<400> 36

Tyr Lys Cys Pro Asp Cys Gly Lys Ser Phe Ser Gln Ser Ser Ser Leu
1 5 10 15
Ile Arg His Gln Arg Thr His
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<210> 37

<211> 23
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<213> Homo sapiens

<400> 37
Phe Gln Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu
1 5 10 15
Lys Thr His Thr Arg Thr His
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<210> 38
<211> 23
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<213> Homo sapiens

<400> 38
Tyr Glu Cys Asp His Cys Gly Lys Ser Phe Ser Gln Ser Ser His Leu
1 5 10 15
Asn Val His Lys Arg Thr His
20

<210> 39
<211> 23
<212> PRT
<213> Homo sapiens

<400> 39
Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu
1 5 10 15
Thr Arg His Arg Arg Ile His
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<210> 40
<211> 23
<212> PRT
<213> Homo sapiens

<400> 40
Phe Glu Cys Lys Asp Cys Gly Lys Ala Phe Ile Gln Lys Ser Asn Leu
1 5 10 15
Ile Arg His Gln Arg Thr His
20

<210> 41
<211> 23
<212> PRT
<213> Homo sapiens

<400> 41
Phe Gln Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu
1 5 10 15
Lys Thr His Thr Arg Thr His

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<210> 42

<211> 23

<212> PRT

<213> Homo sapiens

<400> 42

Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Thr Gln Ser Ser Asn Leu
1 5 10 15

Thr Lys His Lys Lys Ile His
20

<210> 43

<211> 23

<212> PRT

<213> Homo sapiens

<400> 43

Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu
1 5 10 15

Thr Arg His Arg Arg Ile His
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<210> 44

<211> 80

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 44

Tyr Lys Cys Met Glu Cys Gly Lys Ala Phe Asn Arg Arg Ser His Leu
1 5 10 15

Thr Arg His Gln Arg Ile His Thr Gly Glu Lys Pro Phe Lys Cys Pro
20 25 30

Val Cys Gly Lys Ala Phe Arg His Ser Ser Ser Leu Val Arg His Gln
35 40 45

Arg Thr His Thr Gly Glu Lys Pro Tyr Arg Cys Lys Tyr Cys Asp Arg
50 55 60

Ser Phe Ser Ile Ser Ser Asn Leu Gln Arg His Val Arg Asn Ile His
65 70 75 80

<210> 45

<211> 80

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 45

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Tyr Thr Cys Ser Tyr Cys Gly Lys Ser Phe Thr Gln Ser Asn Thr Leu
 1           5           10           15
Lys Gln His Thr Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Lys
          20           25           30
Gln Cys Gly Lys Ala Phe Gly Cys Pro Ser Asn Leu Arg Arg His Gly
          35           40           45
Arg Thr His Thr Gly Glu Lys Pro Tyr Arg Cys Lys Tyr Cys Asp Arg
          50           55           60
Ser Phe Ser Ile Ser Ser Asn Leu Gln Arg His Val Arg Asn Ile His
65           70           75           80

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<210> 46

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 46

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Tyr Arg Cys Lys Tyr Cys Asp Arg Ser Phe Ser Ile Ser Ser Asn Leu
 1           5           10           15
Gln Arg His Val Arg Asn Ile His Thr Gly Glu Lys Pro Phe Gln Cys
          20           25           30
Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr His
          35           40           45
Thr Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys His Asp Cys Gly
          50           55           60
Lys Ser Phe Arg Gln Ser Thr His Leu Thr Arg His Arg Arg Ile His
65           70           75           80
Thr Gly Glu Lys Pro Tyr Glu Cys Asn Tyr Cys Gly Lys Thr Phe Ser
          85           90           95
Val Ser Ser Thr Leu Ile Arg His Gln Arg Ile His
          100           105

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<210> 47

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 47

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Tyr Glu Cys Asp His Cys Gly Lys Ser Phe Ser Gln Ser Ser His Leu
 1           5           10           15
Asn Val His Lys Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Asp
          20           25           30
His Cys Gly Lys Ala Phe Ser Val Ser Ser Asn Leu Asn Val His Arg
          35           40           45
Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys

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      50              55              60
Ala Phe Thr Gln Ser Ser Asn Leu Thr Lys His Lys Lys Ile His Thr
65              70              75              80
Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Thr Gln
      85              90              95
Ser Ser Asn Leu Thr Lys His Lys Lys Ile His
      100              105

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<210> 48
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

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<400> 48
Phe Gln Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu
 1              5              10              15
Lys Thr His Thr Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Asp
      20              25              30
His Cys Gly Lys Ser Phe Ser Gln Ser Ser His Leu Asn Val His Lys
      35              40              45
Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys His Asp Cys Gly Lys
      50              55              60
Ser Phe Arg Gln Ser Thr His Leu Thr Arg His Arg Arg Ile His Thr
65              70              75              80
Gly Glu Lys Pro Tyr Lys Cys Pro Asp Cys Gly Lys Ser Phe Ser Gln
      85              90              95
Ser Ser Ser Leu Ile Arg His Gln Arg Thr His
      100              105

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<210> 49
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

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<400> 49
Tyr Arg Cys Glu Glu Cys Gly Lys Ala Phe Arg Trp Pro Ser Asn Leu
 1              5              10              15
Thr Arg His Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asp
      20              25              30
His Cys Gly Lys Ser Phe Ser Gln Ser Ser His Leu Asn Val His Lys
      35              40              45
Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Asp His Cys Gly Lys
      50              55              60
Ala Phe Ser Val Ser Ser Asn Leu Asn Val His Arg Arg Ile His Thr
65              70              75              80
Gly Glu Lys Pro Tyr Glu Cys Asp His Cys Gly Lys Ser Phe Ser Gln

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85 90 95
 Ser Ser His Leu Asn Val His Lys Arg Thr His
 100 105

<210> 50
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 50
 Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu
 1 5 10 15
 Thr Arg His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Met
 20 25 30
 Glu Cys Gly Lys Ala Phe Asn Arg Arg Ser His Leu Thr Arg His Gln
 35 40 45
 Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys His Asp Cys Gly Lys
 50 55 60
 Ser Phe Arg Gln Ser Thr His Leu Thr Arg His Arg Arg Ile His Thr
 65 70 75 80
 Gly Glu Lys Pro Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln
 85 90 95
 Ser Thr His Leu Thr Arg His Arg Arg Ile His
 100 105

<210> 51
 <211> 109
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 51
 Phe Met Cys Thr Trp Ser Tyr Cys Gly Lys Arg Phe Thr Asp Arg Ser
 1 5 10 15
 Ala Leu Ala Arg His Lys Arg Thr His Thr Gly Glu Lys Pro Phe Gln
 20 25 30
 Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr
 35 40 45
 His Thr Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Asp His Cys
 50 55 60
 Gly Lys Ser Phe Ser Gln Ser Ser His Leu Asn Val His Lys Arg Thr
 65 70 75 80
 His Thr Gly Glu Lys Pro Tyr Glu Cys His Asp Cys Gly Lys Ser Phe
 85 90 95
 Arg Gln Ser Thr His Leu Thr Arg His Arg Arg Ile His
 100 105

<210> 52
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 52
 Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu
 1 5 10 15
 Thr Gln His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Met
 20 25 30
 Glu Cys Gly Lys Ala Phe Asn Arg Arg Ser His Leu Thr Arg His Gln
 35 40 45
 Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys His Asp Cys Gly Lys
 50 55 60
 Ser Phe Arg Gln Ser Thr His Leu Thr Arg His Arg Arg Ile His Thr
 65 70 75 80
 Gly Glu Lys Pro Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln
 85 90 95
 Ser Thr His Leu Thr Arg His Arg Arg Ile His
 100 105

<210> 53
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 53
 Tyr Glu Cys Asp His Cys Gly Lys Ser Phe Ser Gln Ser Ser His Leu
 1 5 10 15
 Asn Val His Lys Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Asp
 20 25 30
 His Cys Gly Lys Ala Phe Ser Val Ser Ser Asn Leu Asn Val His Arg
 35 40 45
 Arg Ile His Thr Gly Glu Lys Pro Phe Glu Cys Lys Asp Cys Gly Lys
 50 55 60
 Ala Phe Ile Gln Lys Ser Asn Leu Ile Arg His Gln Arg Thr His Thr
 65 70 75 80
 Gly Glu Lys Pro Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Gly Cys
 85 90 95
 Pro Ser Asn Leu Arg Arg His Gly Arg Thr His
 100 105

<210> 54
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 54

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Tyr Glu Cys Asp His Cys Gly Lys Ala Phe Ser Val Ser Ser Asn Leu
 1          5          10          15
Asn Val His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys His
          20          25          30
Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu Thr Arg His Arg
          35          40          45
Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Pro Asp Cys Gly Lys
          50          55          60
Ser Phe Ser Gln Ser Ser Ser Leu Ile Arg His Gln Arg Thr His Thr
65          70          75          80
Gly Glu Lys Pro Phe Gln Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg
          85          90          95
Ser Asp His Leu Lys Thr His Thr Arg Thr His
          100          105

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<210> 55

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 55

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Phe Gln Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu
 1          5          10          15
Lys Thr His Thr Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Asp
          20          25          30
His Cys Gly Lys Ser Phe Ser Gln Ser Ser His Leu Asn Val His Lys
          35          40          45
Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys His Asp Cys Gly Lys
          50          55          60
Ser Phe Arg Gln Ser Thr His Leu Thr Arg His Arg Arg Ile His Thr
65          70          75          80
Gly Glu Lys Pro Phe Glu Cys Lys Asp Cys Gly Lys Ala Phe Ile Gln
          85          90          95
Lys Ser Asn Leu Ile Arg His Gln Arg Thr His
          100          105

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<210> 56

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 56

Phe Met Cys Thr Trp Ser Tyr Cys Gly Lys Arg Phe Thr Asp Arg Ser
 1 5 10 15
 Ala Leu Ala Arg His Lys Arg Thr His Thr Gly Glu Lys Pro Phe Gln
 20 25 30
 Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr
 35 40 45
 His Thr Arg Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys
 50 55 60
 Gly Lys Ala Phe Thr Gln Ser Ser Asn Leu Thr Lys His Lys Lys Ile
 65 70 75 80
 His Thr Gly Glu Lys Pro Tyr Glu Cys His Asp Cys Gly Lys Ser Phe
 85 90 95
 Arg Gln Ser Thr His Leu Thr Arg His Arg Arg Ile His
 100 105

<210> 57

<211> 13

<212> PRT

<213> Simian paraInfluenza virus 5

<400> 57

Gly Lys Pro Ile Pro Asn Pro Leu Leu Gly Leu Asp Ser
 1 5 10

<210> 58

<211> 89

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 58

Glu Arg Pro Tyr Ala Cys Pro Val Glu Ser Cys Asp Arg Arg Phe Ser
 1 5 10 15
 Arg Ser Asp Glu Leu Thr Arg His Ile Arg Ile His Thr Gly Gln Lys
 20 25 30
 Pro Phe Gln Cys Arg Ile Cys Met Arg Asn Phe Ser Arg Ser Asp His
 35 40 45
 Leu Thr Thr His Ile Arg Thr His Thr Gly Glu Lys Pro Phe Ala Cys
 50 55 60
 Asp Ile Cys Gly Arg Lys Phe Ala Arg Ser Asp Glu Arg Lys Arg His
 65 70 75 80
 Thr Lys Ile His Leu Arg Gln Lys Asp
 85

<210> 59

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

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<223> Xaa = phenylalanine or tyrosine

<221> VARIANT

<222> 2, 4-8, 10-12, 14-18, 20-21, 23-27

<223> Xaa = any amino acid

<221> VARIANT

<222> 19

<223> Xaa = hydrophobic residue

<400> 59

Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15 20

Xaa His Xaa Xaa Xaa Xaa Xaa His
21 25

<210> 60

<211> 23

<212> PRT

<213> Homo sapiens

<400> 60

Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Gly Cys Pro Ser Asn Leu
1 5 10 15

Arg Arg His Gly Arg Thr His
20

<210> 61

<211> 23

<212> PRT

<213> Homo sapiens

<400> 61

Tyr Gln Cys Asn Ile Cys Gly Lys Cys Phe Ser Cys Asn Ser Asn Leu
1 5 10 15

His Arg His Gln Arg Thr His
20

<210> 62

<211> 23

<212> PRT

<213> Homo sapiens

<400> 62

Tyr Ser Cys Gly Ile Cys Gly Lys Ser Phe Ser Asp Ser Ser Ala Lys
1 5 10 15

Arg Arg His Cys Ile Leu His

20

<210> 63
<211> 23
<212> PRT
<213> Homo sapiens

<400> 63
Tyr Thr Cys Ser Asp Cys Gly Lys Ala Phe Arg Asp Lys Ser Cys Leu
1 5 10 15
Asn Arg His Arg Arg Thr His
20

<210> 64
<211> 23
<212> PRT
<213> Homo sapiens

<400> 64
Tyr Lys Cys Lys Glu Cys Gly Lys Ala Phe Asn His Ser Ser Asn Phe
1 5 10 15
Asn Lys His His Arg Ile His
20

<210> 65
<211> 23
<212> PRT
<213> Homo sapiens

<400> 65
Phe Lys Cys Pro Val Cys Gly Lys Ala Phe Arg His Ser Ser Ser Leu
1 5 10 15
Val Arg His Gln Arg Thr His
20

<210> 66
<211> 24
<212> PRT
<213> Homo sapiens

<400> 66
Tyr Arg Cys Lys Tyr Cys Asp Arg Ser Phe Ser Ile Ser Ser Asn Leu
1 5 10 15
Gln Arg His Val Arg Asn Ile His
20

<210> 67
<211> 23
<212> PRT
<213> Homo sapiens

<400> 67

Tyr Glu Cys Asp His Cys Gly Lys Ala Phe Ser Ile Gly Ser Asn Leu
1 5 10 15
Asn Val His Arg Arg Ile His
20

<210> 68
<211> 23
<212> PRT
<213> Homo sapiens

<400> 68
Tyr Gly Cys His Leu Cys Gly Lys Ala Phe Ser Lys Ser Ser Asn Leu
1 5 10 15
Arg Arg His Glu Met Ile His
20

<210> 69
<211> 23
<212> PRT
<213> Homo sapiens

<400> 69
Tyr Lys Cys Lys Glu Cys Gly Gln Ala Phe Arg Gln Arg Ala His Leu
1 5 10 15
Ile Arg His His Lys Leu His
20

<210> 70
<211> 23
<212> PRT
<213> Homo sapiens

<400> 70
Tyr Lys Cys His Gln Cys Gly Lys Ala Phe Ile Gln Ser Phe Asn Leu
1 5 10 15
Arg Arg His Glu Arg Thr His
20

<210> 71
<211> 23
<212> PRT
<213> Homo sapiens

<400> 71
Phe Gln Cys Asn Gln Cys Gly Ala Ser Phe Thr Gln Lys Gly Asn Leu
1 5 10 15
Leu Arg His Ile Lys Leu His
20

<210> 72
<211> 23
<212> PRT

<213> Homo sapiens

<400> 72

Tyr Ala Cys His Leu Cys Gly Lys Ala Phe Thr Gln Ser Ser His Leu
1 5 10 15
Arg Arg His Glu Lys Thr His
20

<210> 73

<211> 23

<212> PRT

<213> Homo sapiens

<400> 73

Tyr Lys Cys Gly Gln Cys Gly Lys Phe Tyr Ser Gln Val Ser His Leu
1 5 10 15
Thr Arg His Gln Lys Ile His
20

<210> 74

<211> 23

<212> PRT

<213> Homo sapiens

<400> 74

Tyr Ala Cys His Leu Cys Gly Lys Ala Phe Thr Gln Cys Ser His Leu
1 5 10 15
Arg Arg His Glu Lys Thr His
20

<210> 75

<211> 23

<212> PRT

<213> Homo sapiens

<400> 75

Tyr Ala Cys His Leu Cys Ala Lys Ala Phe Ile Gln Cys Ser His Leu
1 5 10 15
Arg Arg His Glu Lys Thr His
20

<210> 76

<211> 23

<212> PRT

<213> Homo sapiens

<400> 76

Tyr Val Cys Arg Glu Cys Gly Arg Gly Phe Arg Gln His Ser His Leu
1 5 10 15
Val Arg His Lys Arg Thr His
20

<210> 77

<211> 23

<212> PRT

<213> Homo sapiens

<400> 77

Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Phe	Arg	Gln	Ser	Ser	His	Leu
1				5				10						15	
Thr	Thr	His	Lys	Ile	Ile	His									
				20											

<210> 78

<211> 23

<212> PRT

<213> Homo sapiens

<400> 78

Tyr	Glu	Cys	Asp	His	Cys	Gly	Lys	Ser	Phe	Ser	Gln	Ser	Ser	His	Leu
1				5					10					15	
Asn	Val	His	Lys	Arg	Thr	His									
				20											

<210> 79

<211> 23

<212> PRT

<213> Homo sapiens

<400> 79

Tyr	Met	Cys	Ser	Glu	Cys	Gly	Arg	Gly	Phe	Ser	Gln	Lys	Ser	Asn	Leu
1				5					10					15	
Ile	Ile	His	Gln	Arg	Thr	His									
				20											

<210> 80

<211> 23

<212> PRT

<213> Homo sapiens

<400> 80

Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Phe	Thr	Gln	Ser	Ser	Asn	Leu
1				5					10					15	
Thr	Lys	His	Lys	Lys	Ile	His									
				20											

<210> 81

<211> 23

<212> PRT

<213> Homo sapiens

<400> 81

Phe	Glu	Cys	Lys	Asp	Cys	Gly	Lys	Ala	Phe	Ile	Gln	Lys	Ser	Asn	Leu
1				5					10					15	

Ile Arg His Gln Arg Thr His
20

<210> 82
<211> 23
<212> PRT
<213> Homo sapiens

<400> 82
Tyr Val Cys Arg Glu Cys Arg Arg Gly Phe Ser Gln Lys Ser Asn Leu
1 5 10 15
Ile Arg His Gln Arg Thr His
20

<210> 83
<211> 23
<212> PRT
<213> Homo sapiens

<400> 83
Tyr Glu Cys Glu Lys Cys Gly Lys Ala Phe Asn Gln Ser Ser Asn Leu
1 5 10 15
Thr Arg His Lys Lys Ser His
20

<210> 84
<211> 23
<212> PRT
<213> Homo sapiens

<400> 84
Tyr Glu Cys Asn Thr Cys Arg Lys Thr Phe Ser Gln Lys Ser Asn Leu
1 5 10 15
Ile Val His Gln Arg Thr His
20

<210> 85
<211> 23
<212> PRT
<213> Homo sapiens

<400> 85
Tyr Val Cys Ser Lys Cys Gly Lys Ala Phe Thr Gln Ser Ser Asn Leu
1 5 10 15
Thr Val His Gln Lys Ile His
20

<210> 86
<211> 23
<212> PRT
<213> Homo sapiens

<400> 86

Tyr Lys Cys Asp Glu Cys Gly Lys Asn Phe Thr Gln Ser Ser Asn Leu
1 5 10 15
Ile Val His Lys Arg Ile His
20

<210> 87

<211> 23

<212> PRT

<213> Homo sapiens

<400> 87

Tyr Glu Cys Asp Val Cys Gly Lys Thr Phe Thr Gln Lys Ser Asn Leu
1 5 10 15
Gly Val His Gln Arg Thr His
20

<210> 88

<211> 23

<212> PRT

<213> Homo sapiens

<400> 88

Tyr Glu Cys Val Gln Cys Gly Lys Gly Phe Thr Gln Ser Ser Asn Leu
1 5 10 15
Ile Thr His Gln Arg Val His
20

<210> 89

<211> 23

<212> PRT

<213> Homo sapiens

<400> 89

Tyr Lys Cys Pro Asp Cys Gly Lys Ser Phe Ser Gln Ser Ser Ser Leu
1 5 10 15
Ile Arg His Gln Arg Thr His
20

<210> 90

<211> 23

<212> PRT

<213> Homo sapiens

<400> 90

Tyr Glu Cys Gln Asp Cys Gly Arg Ala Phe Asn Gln Asn Ser Ser Leu
1 5 10 15
Gly Arg His Lys Arg Thr His
20

<210> 91

<211> 23

Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu
1 5 10 15
Thr Arg His Arg Arg Ile His
20

<210> 96
<211> 22
<212> PRT
<213> Homo sapiens

<400> 96
His Lys Cys Leu Glu Cys Gly Lys Cys Phe Ser Gln Asn Thr His Leu
1 5 10 15
Thr Arg His Gln Arg Thr
20

<210> 97
<211> 25
<212> PRT
<213> Homo sapiens

<400> 97
Tyr Val Cys Asp Val Glu Gly Cys Thr Trp Lys Phe Ala Arg Ser Asp
1 5 10 15
Glu Leu Asn Arg His Lys Lys Arg His
20 25

<210> 98
<211> 25
<212> PRT
<213> Homo sapiens

<400> 98
Tyr His Cys Asp Trp Asp Gly Cys Gly Trp Lys Phe Ala Arg Ser Asp
1 5 10 15
Glu Leu Thr Arg His Tyr Arg Lys His
20 25

<210> 99
<211> 25
<212> PRT
<213> Homo sapiens

<400> 99
Tyr Arg Cys Ser Trp Glu Gly Cys Glu Trp Arg Phe Ala Arg Ser Asp
1 5 10 15
Glu Leu Thr Arg His Phe Arg Lys His
20 25

<210> 100
<211> 25
<212> PRT
<213> Homo sapiens

<400> 100
Phe Ser Cys Ser Trp Lys Gly Cys Glu Arg Arg Phe Ala Arg Ser Asp

1 5 10 15
Glu Leu Ser Arg His Arg Arg Thr His
20 25

<210> 101
<211> 25
<212> PRT
<213> Homo sapiens

<400> 101
Phe Ala Cys Ser Trp Gln Asp Cys Asn Lys Lys Phe Ala Arg Ser Asp
1 5 10 15
Glu Leu Ala Arg His Tyr Arg Thr His
20 25

<210> 102
<211> 25
<212> PRT
<213> Homo sapiens

<400> 102
Tyr His Cys Asn Trp Asp Gly Cys Gly Trp Lys Phe Ala Arg Ser Asp
1 5 10 15
Glu Leu Thr Arg His Tyr Arg Lys His
20 25

<210> 103
<211> 24
<212> PRT
<213> Homo sapiens

<400> 103
Phe Leu Cys Gln Tyr Cys Ala Gln Arg Phe Gly Arg Lys Asp His Leu
1 5 10 15
Thr Arg His Met Lys Lys Ser His
20

<210> 104
<211> 23
<212> PRT
<213> Homo sapiens

<400> 104
Phe Gln Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu
1 5 10 15
Lys Thr His Thr Arg Thr His
20

<210> 105
<211> 23
<212> PRT
<213> Homo sapiens

<400> 105

Phe Ala Cys Glu Val Cys Gly Val Arg Phe Thr Arg Asn Asp Lys Leu
1 5 10 15
Lys Ile His Met Arg Lys His
20

<210> 106

<211> 25

<212> PRT

<213> Homo sapiens

<400> 106

Tyr Val Cys Asp Val Glu Gly Cys Thr Trp Lys Phe Ala Arg Ser Asp
1 5 10 15
Lys Leu Asn Arg His Lys Lys Arg His
20 25

<210> 107

<211> 23

<212> PRT

<213> Homo sapiens

<400> 107

Tyr Lys Cys Met Glu Cys Gly Lys Ala Phe Asn Arg Arg Ser His Leu
1 5 10 15
Thr Arg His Gln Arg Ile His
20

<210> 108

<211> 23

<212> PRT

<213> Homo sapiens

<400> 108

Tyr Ile Cys Arg Lys Cys Gly Arg Gly Phe Ser Arg Lys Ser Asn Leu
1 5 10 15
Ile Arg His Gln Arg Thr His
20

<210> 109

<211> 23

<212> PRT

<213> Homo sapiens

<400> 109

Tyr Leu Cys Ser Glu Cys Asp Lys Cys Phe Ser Arg Ser Thr Asn Leu
1 5 10 15
Ile Arg His Arg Arg Thr His
20

<210> 110

<211> 23
<212> PRT
<213> Homo sapiens

<400> 110
Tyr Glu Cys Lys Glu Cys Gly Lys Ala Phe Ser Ser Gly Ser Asn Phe
1 5 10 15
Thr Arg His Gln Arg Ile His
20

<210> 111
<211> 23
<212> PRT
<213> Homo sapiens

<400> 111
Tyr Glu Cys Asp His Cys Gly Lys Ala Phe Ser Val Ser Ser Asn Leu
1 5 10 15
Asn Val His Arg Arg Ile His
20

<210> 112
<211> 23
<212> PRT
<213> Homo sapiens

<400> 112
Tyr Thr Cys Lys Gln Cys Gly Lys Ala Phe Ser Val Ser Ser Ser Leu
1 5 10 15
Arg Arg His Glu Thr Thr His
20

<210> 113
<211> 23
<212> PRT
<213> Homo sapiens

<400> 113
Tyr Glu Cys Asn Tyr Cys Gly Lys Thr Phe Ser Val Ser Ser Thr Leu
1 5 10 15
Ile Arg His Gln Arg Ile His
20

<210> 114
<211> 23
<212> PRT
<213> Homo sapiens

<400> 114
Tyr Arg Cys Glu Glu Cys Gly Lys Ala Phe Arg Trp Pro Ser Asn Leu
1 5 10 15
Thr Arg His Lys Arg Ile His

20

<210> 115

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Naturally occurring linker peptide

<221> VARIANT

<222> 3

<223> Xaa = Glu or Gln

<221> VARIANT

<222> 4

<223> Xaa = Lys or Arg

<221> VARIANT

<222> 6

<223> Xaa = Tyr or Phe

<400> 115

Thr Gly Xaa Xaa Pro Xaa

1

5

<210> 116

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<221> VARIANT

<222> 1, 13

<223> Xaa = phenylalanine or tyrosine

<221> VARIANT

<222> 2, 4-8, 10-14, 16, 20, 23-27

<223> Xaa = any amino acid

<221> VARIANT

<222> 19

<223> Xaa = a hydrophobic residue

<400> 116

Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa Ser Asn

1

5

10

15

Xaa Xaa Arg His Xaa Xaa Xaa Xaa His

20

25

<210> 117
 <211> 267
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<400> 117
 atcgataagc taattctcac tcattaggca cccaggcgtt tacactttat gcttcggct 60
 cgtataatgt gtggaattgt gagcggataa caatttcaca caggaacag cgtccatggg 120
 taagcctatc cctaaccctc tctcgggtct cgattctaca caagctatgg gtgctcctcc 180
 aaaaaagaag agaaaggtag ctggatccac tagtaacggc cgccagtggt ctggaattct 240
 gcagatatcc atcacactgg cggccgc 267

<210> 118
 <211> 25
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mutated sequence

<400> 118
 Phe Met Cys Thr Trp Ser Tyr Cys Gly Lys Arg Phe Thr Asp Arg Ser
 1 5 10 15
 Ala Leu Ala Arg His Lys Arg Thr His
 20 25

<210> 119
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 119
 Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Gly Cys Pro Ser Asn Leu
 1 5 10 15
 Arg Arg His Gly Arg Thr His
 20

<210> 120
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 120
 Tyr Thr Cys Ser Asp Cys Gly Lys Ala Phe Arg Asp Lys Ser Cys Leu
 1 5 10 15
 Asn Arg His Arg Arg Thr His
 20

<210> 121

<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> mutated sequence

<400> 121
Tyr Ala Cys Pro Val Glu Ser Cys Asp Arg Arg Phe Ser Asp Ser Ser
1 5 10 15
Asn Leu Thr Arg His Ile Arg Ile His
20 25

<210> 122
<211> 23
<212> PRT
<213> Homo sapiens

<400> 122
Phe Lys Cys Pro Val Cys Gly Lys Ala Phe Arg His Ser Ser Ser Leu
1 5 10 15
Val Arg His Gln Arg Thr His
20

<210> 123
<211> 24
<212> PRT
<213> Homo sapiens

<400> 123
Tyr Arg Cys Lys Tyr Cys Asp Arg Ser Phe Ser Ile Ser Ser Asn Leu
1 5 10 15
Gln Arg His Val Arg Asn Ile His
20

<210> 124
<211> 23
<212> PRT
<213> Homo sapiens

<400> 124
Tyr Lys Cys His Gln Cys Gly Lys Ala Phe Ile Gln Ser Phe Asn Leu
1 5 10 15
Arg Arg His Glu Arg Thr His
20

<210> 125
<211> 23
<212> PRT
<213> Drosophila

<400> 125

Tyr Thr Cys Ser Tyr Cys Gly Lys Ser Phe Thr Gln Ser Asn Thr Leu
1 5 10 15
Lys Gln His Thr Arg Ile His
20

<210> 126

<211> 23

<212> PRT

<213> Homo sapiens

<400> 126

Tyr Glu Cys Asp His Cys Gly Lys Ser Phe Ser Gln Ser Ser His Leu
1 5 10 15
Asn Val His Lys Arg Thr His
20

<210> 127

<211> 23

<212> PRT

<213> Homo sapiens

<400> 127

Tyr Met Cys Ser Glu Cys Gly Arg Gly Phe Ser Gln Lys Ser Asn Leu
1 5 10 15
Ile Ile His Gln Arg Thr His
20

<210> 128

<211> 23

<212> PRT

<213> Homo sapiens

<400> 128

Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Thr Gln Ser Ser Asn Leu
1 5 10 15
Thr Lys His Lys Lys Ile His
20

<210> 129

<211> 23

<212> PRT

<213> Homo sapiens

<400> 129

Phe Glu Cys Lys Asp Cys Gly Lys Ala Phe Ile Gln Lys Ser Asn Leu
1 5 10 15
Ile Arg His Gln Arg Thr His
20

<210> 130

<211> 23

<212> PRT

<213> Homo sapiens

<400> 130

Tyr Val Cys Ser Lys Cys Gly Lys Ala Phe Thr Gln Ser Ser Asn Leu
1 5 10 15
Thr Val His Gln Lys Ile His
20

<210> 131

<211> 23

<212> PRT

<213> Homo sapiens

<400> 131

Tyr Lys Cys Pro Asp Cys Gly Lys Ser Phe Ser Gln Ser Ser Ser Leu
1 5 10 15
Ile Arg His Gln Arg Thr His
20

<210> 132

<211> 23

<212> PRT

<213> Homo sapiens

<400> 132

Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu
1 5 10 15
Thr Gln His Arg Arg Ile His
20

<210> 133

<211> 23

<212> PRT

<213> Homo sapiens

<400> 133

Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu
1 5 10 15
Thr Arg His Arg Arg Ile His
20

<210> 134

<211> 23

<212> PRT

<213> Homo sapiens

<400> 134

Phe Gln Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu
1 5 10 15
Lys Thr His Thr Arg Thr His
20

<210> 135
<211> 25
<212> PRT
<213> Homo sapiens

<400> 135
Tyr Val Cys Asp Val Glu Gly Cys Thr Trp Lys Phe Ala Arg Ser Asp
1 5 10 15
Lys Leu Asn Arg His Lys Lys Arg His
20 25

<210> 136
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> mutated sequence

<400> 136
Phe Ala Cys Pro Glu Cys Pro Lys Arg Phe Met Arg Ser Asp Asn Leu
1 5 10 15
Thr Gln His Ile Lys Thr His
20

<210> 137
<211> 23
<212> PRT
<213> Homo sapiens

<400> 137
Tyr Lys Cys Met Glu Cys Gly Lys Ala Phe Asn Arg Arg Ser His Leu
1 5 10 15
Thr Arg His Gln Arg Ile His
20

<210> 138
<211> 23
<212> PRT
<213> Homo sapiens

<400> 138
Tyr Ile Cys Arg Lys Cys Gly Arg Gly Phe Ser Arg Lys Ser Asn Leu
1 5 10 15
Ile Arg His Gln Arg Thr His
20

<210> 139
<211> 23
<212> PRT
<213> Homo sapiens

<400> 139

Tyr Glu Cys Asp His Cys Gly Lys Ala Phe Ser Val Ser Ser Asn Leu
1 5 10 15
Asn Val His Arg Arg Ile His
20

<210> 140

<211> 23

<212> PRT

<213> Homo sapiens

<400> 140

Tyr Thr Cys Lys Gln Cys Gly Lys Ala Phe Ser Val Ser Ser Ser Leu
1 5 10 15
Arg Arg His Glu Thr Thr His
20

<210> 141

<211> 23

<212> PRT

<213> Homo sapiens

<400> 141

Tyr Glu Cys Asn Tyr Cys Gly Lys Thr Phe Ser Val Ser Ser Thr Leu
1 5 10 15
Ile Arg His Gln Arg Ile His
20

<210> 142

<211> 23

<212> PRT

<213> Homo sapiens

<400> 142

Tyr Arg Cys Glu Glu Cys Gly Lys Ala Phe Arg Trp Pro Ser Asn Leu
1 5 10 15
Thr Arg His Lys Arg Ile His
20

<210> 143

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> putative target sequence

<400> 143

daadaaaath ga

12

<210> 144

<211> 13

<212> DNA
<213> Artificial Sequence

<220>
<223> putative target sequence

<221> misc_feature
<222> 10
<223> n = a,t,c or g

<400> 144
gyagrahgan ggk

13

<210> 145
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> putative target sequence

<400> 145
hgaaathgag gt

12

<210> 146
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> putative target sequence

<400> 146
gragragsgg ra

12

<210> 147
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> putative target sequence

<221> misc_feature
<222> 7
<223> n = a,t,c or g

<400> 147
grahgaggg tc

12

<210> 148
<211> 12

<212> DNA
<213> Artificial Sequence

<220>
<223> putative target sequence

<400> 148
gragragggh ga

12

<210> 149
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> putative target sequence

<400> 149
gavgaaaath ga

12

<210> 150
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> putative target sequence

<221> misc_feature
<222> 1
<223> n = a,t,c or g

<400> 150
ngggyagraa at

12

<210> 151
<211> 13
<212> DNA
<213> Artificial Sequence

<220>
<223> putative target sequence

<221> misc_feature
<222> 10
<223> n = a,t,c or g

<400> 151
gaagrahgan ggk

13

<210> 152
<211> 12

<212> DNA
 <213> Artificial Sequence

<220>
 <223> putative target sequence

<221> misc_feature
 <222> 7
 <223> n = a,t,c or g

<400> 152
 gradaanggg tc

12

<210> 153
 <211> 12
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> binding sequence

<221> misc_feature
 <222> 10
 <223> n = a, t, c, or g

<400> 153
 gaagrahgan gg

12

<210> 154
 <211> 189
 <212> PRT
 <213> Escherichia coli

<400> 154
 Met Lys Arg Leu Ile Val Gly Ile Ser Gly Ala Ser Gly Ala Ile Tyr
 1 5 10 15
 Gly Val Arg Leu Leu Gln Val Leu Arg Asp Val Thr Asp Ile Glu Thr
 20 25 30
 His Leu Val Met Ser Gln Ala Ala Arg Gln Thr Leu Ser Leu Glu Thr
 35 40 45
 Asp Phe Ser Leu Arg Glu Val Gln Ala Leu Ala Asp Val Thr His Asp
 50 55 60
 Ala Arg Asp Ile Ala Ala Ser Ile Ser Ser Gly Ser Phe Gln Thr Leu
 65 70 75 80
 Gly Met Val Ile Leu Pro Cys Ser Ile Lys Thr Leu Ser Gly Ile Val
 85 90 95
 His Ser Tyr Thr Asp Gly Leu Leu Thr Arg Ala Ala Asp Val Val Leu
 100 105 110
 Lys Glu Arg Arg Pro Leu Val Leu Cys Val Arg Glu Thr Pro Leu His
 115 120 125
 Leu Gly His Leu Arg Leu Met Thr Gln Ala Ala Glu Ile Gly Ala Val
 130 135 140

Ile Met Pro Pro Val Pro Ala Phe Tyr His Arg Pro Gln Ser Leu Asp
145 150 155 160
Asp Val Ile Asn Gln Thr Val Asn Arg Val Leu Asp Gln Phe Ala Ile
165 170 175
Thr Leu Pro Glu Asp Leu Phe Ala Arg Trp Gln Gly Ala
180 185

<210> 155
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 155
ctggaaagaa ccggaagaga tgctg

25

<210> 156
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 156
tgaaacgact cattgtaggc atcag

25

<210> 157
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> target sequence

<221> misc_feature
<222> 7
<223> n = a,t,c or g

<400> 157
gctgranggg ah

12